

New Jersey Department of Transportation
Bureau of Research

Technical Brief



Teen Driver Safety Metrics: Effectiveness of NJ's GDL Law in Improving Teen Driver Safety

The goal of this research program was to evaluate the effectiveness of New Jersey's Graduated Driver License (GDL) law and subsequent GDL initiatives on motor vehicle crash and traffic violation rates for teen drivers aged 16 through 20. Generally, the GDL and the initiatives effectively reduced crash and violation rates amongst teen drivers as compared to adult drivers.

Background

The New Jersey Graduated Driver's License (GDL) program is one of the most progressive and stringent GDL systems in place in the United States. Teen drivers can receive a learner's permit at a minimum age of 16 allowing them to practice supervised driving. At a minimum age of 17, drivers can graduate to a provisional license allowing them to practice unsupervised driving until the full license is obtained at a minimum age of 18. The GDL program allows novice drivers to gain driving experience while restricting driving during more complicated driving scenarios. Restrictions include, but are not limited to, night driving and the number of passengers allowed in the vehicle. Additionally, as of 2010, drivers with GDL are required to display a decal on the license plates of the vehicle while driving.



Teen drivers are particularly at risk at night, a driving condition limited by GDL. In this crash, a NJ teen driver struck a tree minutes before midnight, fracturing the spine of the passenger. (NASS-CDS 2006-04-070)

Research Objectives and Approach

The specific objectives were to (1) evaluate NJ crash data and Motor Vehicle Commission driver history data to determine if teen driver crashes and violations in New Jersey have significantly declined since enactment of a GDL law in 2001, (2) evaluate the effectiveness of the September 2008 directive banning plea-bargains for drivers with a GDL and its effect on recidivism among teen drivers, and (3) evaluate effectiveness of May 2010 GDL regulations on additional hour of curfew and passenger restrictions. To quantify the effectiveness of these different initiatives, teen crashes and violations were normalized by teen population and compared to adult crash and violation rates normalized by population.

Findings

GDL Implementation (January 2001). Crash and violation rates from 01/1997-12/1999 were compared to those from 01/2005-08/2008 to determine the effects of GDL implementation.

1. A significant decrease in crash rates for 16-18 year old drivers as compared to adult crash rates was observed. There was also a significant increase in crash rates amongst 19-20 year old drivers.
2. Violation rates significantly decreased after the start of the GDL for drivers age 16-18.

Plea Bargain Ban (September 2008). Crash and violation rates from 01/2005-08/2008 were compared to those from 10/2008-04/2010 to determine the effects of the plea bargain ban. Recidivism rates were investigated from 10/2005-08/2008 to 10/2008-08/2010.

1. Teen drivers between the ages of 16 and 18 had a significant decrease in the number of single vehicle crashes after the implementation of the no-plea bargain.
2. Zero-point violation rates drivers significantly decreased among 16-17 year old teen drivers. There was also a significant increase in point-carrying violations for these age groups. This implies that the plea-bargain ban is effective in preventing teens from converting point carrying violations to zero point violations.
3. The likelihood of recidivism of point-carrying violations two years after licensure significantly decreased after the plea bargain ban was implemented, though no difference was observed one year after licensure. Therefore, plea bargain ban effectively reduced the likelihood of recidivism for point-carrying violations over time.

Kyleigh's Law and New GDL Restrictions (May 2010). Crash and violation rates from 01/2005-08/2008 were compared to those from 06/2010-06/2012 to determine the effects of the increased driving restrictions. These results also include the effects of the plea bargain ban.

1. Significant decreases in crash rates for teens aged 17-20 were observed after the implementation of Kyleigh's Law and the new GDL restrictions.
2. There was a significant decrease in the rate of all violations and of zero-point violations for 16-18 year old drivers after these laws were enacted. There was a significant increase in the point-carrying violation rate amongst 17 year old drivers, though this may be attributed to the plea bargain ban.

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A final report is available online at: <http://www.state.nj.us/transportation/refdata/research/>. If you would like a copy of the full report, send an e-mail to: Research.Bureau@dot.state.nj.us.

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